GATITU MIXED SEC SCHOOL

PHYSICS FORM 3 END OF TERM 1 2015 EXAM

1. Define the following terms ,and give their SI units
2. Give the difference between uniform and instantaneous velocity. 2mks
3. State the laws of refraction. 2mks
4. How much current is taken by a bulb whose rate is 100v and which is designed for mains supply of 250v. 3mks
5. State four factors affecting rate of evaporation. 4mks
6. State and explain the factors determining heat produced by an electric current. 6mks
7. Name two applications of total internal reflection. 2mks
8. A truck weighs 1.0× 102 and is free to move .what force will give it an acceleration of 2ms-1 . find the frictional force acting on the trolley if the tension in the cord is 5N. 3mks
9. A sample of carbon iv oxide gas occupies 90cmat 60 c. what will be the volume of the same sample at 25c? 3mks
10. The critical angle for water is 48.6 calculate the refractive index of water. 3mks
11. A body is uniformly accelerated from rest to a final velocity of 100ms-1 in 10 s. calculate the distance covered. 3mks
12. A sample of gas occupies a volume of 215 cm3 at 28 c under a pressure of 900mmhg. What would its volume be at standard pressure and temperature? 3mks
13. Determine the change in momentum produced when a force of 3.5 × 103N acts on a body which is at rest for 0.02 seconds. 2mks
14. What velocity will be given to the body if it has a mass of 20kg? 2mks